

Application Serial No. 10/734,753 Response to Office Action mailed Sep. 7, 2005

**AMENDMENTS TO THE DRAWINGS:**

The attached sheet of drawings includes changes to FIG. 4. This sheet, which includes FIGS. 4-5, replaces the original sheet comprising FIGS. 4-5. The call out lines to chamber 82 and outlet 86 have been extended so as to be in contact with their respective elements.

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### **REMARKS**

Claims 1-28 are pending in this application. No claims have been allowed. The Examiner rejected claims 1-28 under 35 U.S.C. § 103 (a) as being unpatentable over Rowe (U.S. Pat. No. 4,075,462) in view of Ortyn et al. (U.S. Pat. No. 6,532,061).

In this Response, the Applicant has amended the Specification at paragraphs [0004], [0007], [0010], [0014], and [0015] to correct minor typographical errors. The Applicant amended FIG. 4 to clarify the call out lines to elements 82 and 86. The Applicant has amended claim 1 to incorporate the limitation of dependent claim 3 and has amended claim 10 to include the limitation of "fluid moving at laminar flow". No new matter within the prohibition of 35 U.S.C. § 132 has been added. The Applicant kindly requests reconsideration and allowance of the pending claims for the reasons detailed below.

#### **1) Rejection of Claims 1-9:**

The Examiner rejected claims 1-9 under 35 U.S.C. § 103 (a) as being unpatentable over Rowe (U.S. Pat. No. 4,075,462) in view of Ortyn et al. (U.S. Pat. No. 6,532,061). Specifically, with regard to claim 1, the Examiner concluded that Rowe discloses a device for analyzing microparticles that comprises: "a chamber 25 (FIG. 1) comprising inlets 17, 20, 23 (FIG. 1) and an outlet 11 (FIG. 2) for respectively introducing and dispensing a flowing fluid comprising microparticles (sic, microparticles); a light source 14 (FIG. 1) adapted to provide incident light through the chamber; and an imaging system 32 (FIG. 1) configured to acquire images of the flowing fluid within the chamber." The Applicant agrees that Rowe discloses the limitations of a chamber and a light source as previously claimed in claim 1.

The Examiner further concluded that Ortyn et al. similarly discloses a system for determining characteristics of particles that comprises a plurality of photometer 50, 50a (FIG. 43) for measuring the intensity of the light. The Examiner concluded that it would have been obvious to modify Rowe with the photometer as taught by Ortyn et al. to measure a plurality of characteristics of the particles.

The Examiner made several other conclusions concerning dependent claims 2 and 4-9, none of which are considered pertinent in view of the Applicant's amendment to claim 1. Rather than addressing the merits of the conclusions related to these dependent

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claims, the Applicant at this time just respectfully traverses the Examiner's conclusion regarding the limitations of former claim 3, now incorporated as limitations of amended claim 1. Accordingly, this Response should not be deemed as concurring in the Examiner's conclusions regarding the other dependent claims 2 and 4-9.

With regard to former dependent claim 3, the Examiner asserted that "Rowe does not disclose a laminar flow of fluid. However, it would have been obvious to modify Rowe to use the system in different flow patterns or different channel sizes."

The Applicant respectfully traverses the Examiner's assertion related to former dependent claim 3 (now incorporated into independent claim 1) as failing to establish a *prima facie* case of obviousness because the Examiner makes an assertion that there is a motivation or suggestion to modify Rowe without citing any reference to support this assertion.

In making this traversal, the Applicant respectfully requests the Examiner first to note the guidance of M.P.E.P. § 2143, entitled "Basic Requirements of a *Prima Facie* Case of Obviousness", which states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Based on the fact that the Examiner did not cite a reference to support his assertion of modifying Rowe, the Applicant interprets this assertion as being based on "common knowledge" or as being "well known." In this regard, the Applicant respectfully draws the Examiner's attention to M.P.E.P. § 2144.03, entitled "Reliance on Common Knowledge in the Art or 'Well Known' Prior Art." This portion provides the following:

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In limited circumstances, it is appropriate for an examiner to take official notice of facts not in the record or to rely on "common knowledge" in making a rejection, however such rejections should be judiciously applied....It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art....The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice and be allowed to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made....To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art.

In accordance with the procedure outlined in M.P.E.P. § 2144.03, the Applicant respectfully traverses the Examiner's "well known" or "common knowledge" conclusion that it "would have been obvious to modify Rowe to use the system in different flow patterns". Specifically, the Applicant draws the Examiner's attention to the cited art of Rowe itself, which states at Column 5, line 1: "The sample chamber is also preferably designed in such manner as to create *turbulence*, due to chamber geometry, which produces a random distribution and orientation of the particles as the sample passes through the sample chamber." (Emphasis added). Accordingly, the Applicant respectfully submits that the cited art of Rowe actually prefers the chamber to have "turbulent" flow of fluid. As is well understood by a person of ordinary skill in the pertinent art, "turbulent flow" is essentially the opposite of and is not akin to "laminar flow". (See, for instance, the differences given in the respective definitions of these terms found in McGraw-Hill's Dictionary of Scientific and Technical Terms, 3rd Edition). In view of the teaching of the cited art of Rowe, the Applicant suggests the "obvious to modify Rowe" assertion for "laminar flow of the fluid" made by the

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Examiner is not capable of instant and unquestionable demonstration as being well-known. In fact, Rowe itself directly contradicts such a conclusion by saying that the chamber 25 is preferably designed to create turbulence. Because the facts asserted are not capable of such instant and unquestionable demonstration, it is inappropriate for the Examiner to take official notice of such facts without a cited reference to indicate otherwise. Given that the Examiner has not cited such a reference, the Applicant suggests it is improper for the Examiner to conclude that it would not have been common knowledge to a person of ordinary skill in the art to "modify Rowe to use the system in different flow patterns". The Applicant respectfully suggests that the Examiner's assertion regarding modifying Rowe for laminar flow of fluid is not properly based upon "common knowledge" and should be withdrawn, thereby rendering currently amended claim 1 and its dependent claims 2-9 allowable under the cited art.

**2) Claims 10-17:**

The Examiner rejected independent claim 10 relying primarily on his rejections to original claims 1 and 5. In response to these rejections, the Applicant has amended claim 10 by describing the imaging system as having the additional limitation of "fluid moving at laminar flow within the chamber." Accordingly, the Applicant also asserts that the argument made previously in Section 1 of these Remarks concerning claims 1-9 is similarly applicable for currently amended independent claim 10 and its dependent claims 11-17. Specifically, the Applicant asserts that the cited art of Rowe in combination with Ortyn does not teach or suggest a microparticle flow sensor system configured for a "fluid moving at laminar flow." The Applicant respectfully suggests that the Examiner's rejection of these claims should be withdrawn in light of the current amendment to independent claim 10 and its dependent claims 11-17.

**3) Claims 18-24:**

The Examiner rejected independent claim 18 by referring first to the rejection of claim 1 for the system and then stating that the cited art of Ortyn "does not disclose comparing intensities of different images" but does disclose "classifying particles by analyzing different images of the particles (column 18, lines 5-15)." The Examiner then

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concludes that "it would have been obvious to modify Orlyn with the claimed comparing step to characterize the particles more accurate (sic, accurately)." Once again, the Examiner cites no art in making this conclusion. The Examiner also apparently overlooks certain language in original independent claim 18, specifically "a fluid comprising microparticles in laminar motion", given that the Examiner does not refer the Applicant to the rejection made earlier to dependent claim 3 in support of the rejection to claim 18.

The Applicant respectfully traverses the Examiner's rejection of independent claim 18 because it fails to establish a *prima facie* case of obviousness as given in M.P.E.P. § 2143. The Examiner has already conceded that the cited art of Rowe "does not disclose a laminar flow of fluid" (see Examiner's Office Action dated September 7, 2005, page 3, line 3), but for some reason the Examiner does not articulate how the limitation of "laminar motion" as given in the method of claim 18 is taught or suggested by the cited art of Rowe in combination with Orlyn.

Moreover, the Examiner makes an assertion that there is a motivation or suggestion to modify Orlyn without citing any reference to support this assertion. Instead, the Examiner appears to be citing the Applicant's own disclosure as the motivation for modifying the cited combination of art. The Applicant reaches this conclusion because the Examiner language states "it would have been obvious to modify Orlyn with the claimed comparing step to characterize the particles more accurate (sic, accurately)." The "claimed comparing step" originates from the Applicant's disclosure, not from any cited art. The Applicant respectfully draws the Examiner's attention to M.P.E.P. § 2143, which provides that "[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F. 2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991)." In other words, the Examiner cannot rely on the Applicant's disclosure as the motivation for modifying the cited art. Given these deficiencies, the Applicant respectfully requests that the Examiner withdraw the rejection of claim 18 and its dependent claims 19-24.

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**4) Claims 25-28:**

The Examiner rejected independent claim 25 by referring to the rejection of "claim 1 for the system and claim 3 for the laminar-flow." In response thereto, the Applicant respectfully traverses the Examiner's assertion related to former dependent claim 3 and renews the argument made in Section 1 of these Remarks that this assertion (now relied upon by the Examiner to reject independent claim 25) fails to establish a *prima facie* case of obviousness as given in M.P.E.P § 2143. The Examiner makes an assertion that there is a motivation or suggestion to modify Rowe without citing any reference to support his assertion. Moreover, Rowe itself directly contradicts such an assertion by saying that the chamber 25 is preferably designed to create turbulence. The Applicant respectfully suggests that the Examiner's assertion regarding modifying Rowe for laminar flow of fluid is not properly based upon "common knowledge" and should be withdrawn, thereby rendering original independent claim 25 and its dependent claims 26-28 allowable under the cited art.

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**CONCLUSION**

In view of the above Response, the Applicant submits that all pending claims in the instant application are in condition for allowance. The Applicants respectfully request an early action to this end.

Respectfully submitted,



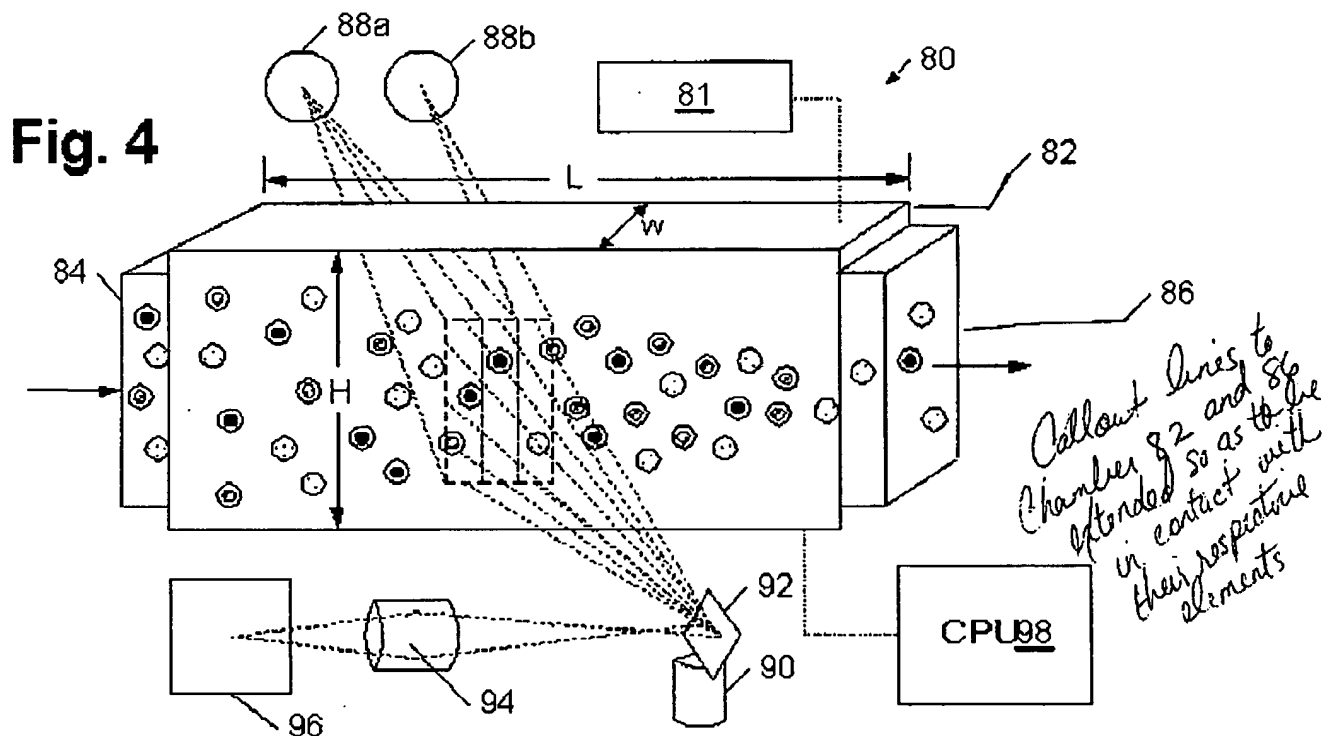
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Attachments



Application No. 10/734,753  
 Amendment Dated December 1, 2005  
 Reply to Office Action of September 7, 2005  
 Annotated Sheet Showing Changes



**Fig. 5**

**Wavelength Specific Light Absorption  
(per pixel)**

